an epidermal growth factor-directed therapy when epidermal growth factor receptor RNA is detected in the animal or human's plasma or serum.

26. A method for selecting an animal or human with cancer for an epidermal growth factor receptor-directed therapy comprising the step of performing the method of claim 2 using a bodily fluid from said animal or human and selecting the animal or human for an epidermal growth factor-directed therapy when epidermal growth factor receptor RNA is detected in the animal or human's plasma or serum.

27. A method for selecting an animal or human with cancer for a her-2/neu-directed therapy comprising the step of performing the method of claim 1 using blood plasma or serum from said animal or human and selecting the animal or human for an epidermal growth factor-directed therapy when her-2/neu RNA is detected in the animal or human's plasma or serum.

28. A method for selecting an animal or human with cancer for a her-2/neu-directed therapy comprising the step of performing the method of claim 2 using a bodily fluid from said animal or human and selecting the animal or human for an epidermal growth factor-directed therapy when her-2/neu RNA is detected in the animal or human's plasma or serum..

29. The method of claim 23 wherein the therapy is a monoclonal antibody or a tyrosine kinase inhibitor.

30. The method of claim 24 wherein the therapy is a monoclonal antibody or a tyrosine kinase inhibitor.

31. The method of claim 25 wherein the therapy is a monoclonal antibody or a tyrosine kinase inhibitor.

32. The method of claim 26 wherein the therapy is a monoclonal antibody or a tyrosine kinase inhibitor.

33. The method of claim 27 wherein the therapy is a monoclonal antibody or a tyrosine kinase inhibitor.

34. The method of claim 28 wherein the therapy is a monoclonal antibody or a tyrosine kinase inhibitor.

35. A method for selecting an animal or human with cancer for a cancer-directed therapy, the method comprising the steps of:

a) extracting mammalian RNA from plasma or serum of the animal or human, wherein a fraction of said extracted RNA comprises a tumor-derived or tumor-specific RNA that is epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof;

b) amplifying or signal amplifying said fraction of the extracted RNA or cDNA corresponding thereto, wherein amplification is performed qualitatively or quantitatively using primers specific for the tumor-derived or tumor-associated RNA or cDNA corresponding thereto to produce an amplified product; and

c) detecting the amplified product produced from said RNA or cDNA, whereby detection thereof selects the human with cancer for a cancer directed therapy.

36. A method according to claim 1, further comprising the step of performing a diagnostic test for diagnosing cancer or premalignancy when epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof is detected in plasma or serum of an animal or human.

37. A method according to claim 2, further comprising the step of performing a diagnostic test for diagnosing cancer or premalignancy when epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof is detected in a bodily fluid of an animal or human.

38. The method of claim 35, wherein the cancer-directed therapy is surgery, chemotherapy, biologic therapy, vaccine therapy, anti-angiogenic therapy, or radiotherapy.